

## PATENT COOPERATION TREATY

0111979.1

BARKER BRETTCELL

Target Selection

In the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

27 AUG 2003

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To:

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RECEIVED

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

(PCT Rule 71.1)

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SEEN BY: <i>DB</i>
AGENT: <i>CB</i>

Date of mailing  
(day/month/year)

25.08.2003

Applicant's or agent's file reference  
CJS0835

## IMPORTANT NOTIFICATION

International application No.  
PCT/GB02/02324International filing date (day/month/year)  
17.05.2002Priority date (day/month/year)  
17.05.2001

Applicant

LUCAS INDUSTRIES LIMITED et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

## 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the International  
preliminary examining authority:

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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>CJS0835</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/GB02/02324</b>	International filing date ( <i>day/month/year</i> ) <b>17.05.2002</b>	Priority date ( <i>day/month/year</i> ) <b>17.05.2001</b>
International Patent Classification (IPC) or both national classification and IPC <b>B60K31/00</b>		
Applicant <b>LUCAS INDUSTRIES LIMITED et al.</b>		



  

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	<p>This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of    sheets.</p>

3.	<p>This report contains indications relating to the following items:</p> <p>I    <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II   <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V   <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>
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Date of submission of the demand  <b>16.12.2002</b>	Date of completion of this report  <b>25.08.2003</b>
<p>Name and mailing address of the international preliminary examining authority:</p> <p> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</p>	<p>Authorized Officer</p> <p><b>Geuss, H</b></p> <p>Telephone No. +49 89 2399-7330</p> <p style="text-align: right;"></p>

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB02/02324

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

### Description, Pages

1-14 as originally filed

### Claims, Numbers

1-23 as originally filed

### Drawings, Sheets

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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EXAMINATION REPORT**

International application No. **PCT/GB02/02324**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-7,9-23
Inventive step (IS)	Yes: Claims	
	No: Claims	8
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Ref. Item V.2**

**Documents**

The following documents cited in the international search report are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: EP-A-0 890 470 (HONDA MOTOR CO LTD) 13 January 1999
- D2: US-A-5 913 375 (NISHIKAWA MASAO) 22 June 1999
- D3: US-A-5 926 126 (ENGELMAN GERALD H) 20 July 1999

**Novelty and Inventive Step**

The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claim 1 lacks novelty.

Document D1 discloses all the following features which are included in independent claim 1 of the present application (comments and reference signs in brackets refer to D1):

a target object sensing apparatus for a host vehicle, the apparatus comprising (abstract)

a lane detection apparatus provided on the host vehicle which includes an image acquisition means adapted to capture an image of at least a part of the road ahead of the host vehicle (col. 6, lines 10 et. seq., line 33),

a vehicle path estimation means adapted to estimate a projected path for the host vehicle (e.g. col. 7, lines 28 to 54, abstract)

a target vehicle detection means located on the host vehicle which is adapted to identify the position located on the road ahead of the host vehicle (dito, Fig. 4), the position including data representing the distance of the target vehicle from the host vehicle (dito)

first data processing means adapted to determine a target lane (dito, abstract, fig. 3 and 4)

in which the host vehicle will be located when it has travelled along the projected path by distance the target object (col. 9, lines 44 et. seq., fig. 7),

second processing means adapted to compare the position of the target vehicle determined by the target detection means with the position of the target lane to

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provide a processed estimate of the actual position of the target object (dito, col.7, lines 38 et seq., col. 9 lines 43 et seq.) .

From fig. 7 in combination with the corresponding part of the description on page 9, line 44 et seq. it is clear for the person skilled in the art, that the calculation means of D1 are able to predict the position of the host vehicle in a future path (in particular lines 51 et seq.).

This implies that also the position of the host vehicle can be estimated, when it has travelled by the distance to the target object.

In D1 the positions of all participants (host and target vehicles) are plotted in a absolute system of coordinates (col. 7 and col. 9) in order to be able to compare distances of objects on real and estimated paths.

Therefore, even a clarified claim would not be lead to a subject-matter which would fulfill the provisions of inventive step.

Furthermore Claims 2 - 23 seem not to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of PCT with respect to novelty and/or inventive step. These claims suggest only slight constructional changes in the device of claim 1 which comes within the scope of the customary practice - with regard to the Documents D1 to D3, followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of the claims 2 to 23 lacks at least inventive step.

Furthermore, the subject-matter of claim 1 is disclosed in documents D2 and D3 as well, reference is made in particular to the passages cited in the search report.